

PRECIPITATION EFFECTS MITIGATION AT ANTENNAE SYSTEMS

Abstract of the Disclosure

Apparatus and methods for mitigating precipitation effects realized at an antenna system of an instrument such as a microwave radiometer are disclosed. One embodiment of the apparatus includes a blower mechanism that enables instrument operation even during precipitation events (rain, snow, sleet, or excessive condensation) by causing a flow of air at relatively high velocity tangentially across the antenna system. The air flow is of sufficient force to disallow contact by hydrometeors with the antenna or antenna window of the system by redirecting the path of the falling hydrometeors in flight and/or to sweep hydrometeors reaching or formed at the window from the vicinity of the window. Other mechanisms for such precipitation effects mitigation are also disclosed.